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ABSTRACT

The exemplary project to develop models for career education was conducted in nine Iowa schools selected for their scattered locations and for representing rural, suburban, and metropolitan communities of Iowa. Awareness of self and of the world of work at the primary level was followed by exploration of occupations in junior high school and further orientation and exploration in senior high school, along with vocational preparation for some students. Procedures for integrating and implementing the career development concept in the school curriculum are described. This is accomplished by defining and conceptualizing career education in the school structure and curriculum, by formulating and integrating objectives into the current course of study, and by developing instructional activities through inservice programs with strong administrative commitment and support. Provided are examples illustrating the objectives, activities, resources, and evaluation techniques for specific subject areas at various grade levels: kindergarten, fourth, sixth, and high school. A timetable for integrating the career development concept into the school curriculum concludes the document. (BP)

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Models for Career Education in Iowa

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IMPLEMENTING CAREER EDUCATION IN THE SCHOOL CURRICULUM

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Models for Career Education in Iowa

IMPLEMENTING CAREER EDUCATION IN THE SCHOOL CURRICULUM

Conducted Under Research and Exemplary Grants
from Career Education Division
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Grimes State Office Building
Des Moines, Iowa 50319

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PREFACE

Career Education - Is it good for kids? -- That's a question that has prompted many of us to search for a greater understanding of the concept and to reassess the types of experiences our educational programs provide. This search is resulting in a growing commitment to assure curriculum objectives and activities that provide career education experiences for all students.

An exemplary project, Models for Career Education in Iowa, was initiated in 1971 thru the Iowa Department of Public Instruction. The purpose of the effort was to research, define and describe an emerging concept of career education and to suggest possible approaches for implementation in grades K-8. In 1972 the project was expanded to include the curriculum of high school students.

The project is sponsored by the Iowa Department of Public Instruction in cooperation with Iowa State University and nine local school districts. The project staff under the direction of Dr. Alan Kahler, Iowa State University, is working with the following local schools: Shenandoah, Humboldt, Davenport, Marshalltown, Carroll, Sheldon, Osceola, South Winneshiek and Springville Community School Districts. The third party evaluation is being provided by the Iowa Center for Research in School Administration under the leadership of Dr. Ralph Van Dusseldorp and Dr. Walter Foley.

A series of workshops were conducted involving participating school staff and outside resource persons with various backgrounds and expertise. These workshops have provided a multi-discipline approach in establishing understanding and agreement of a set of basic objectives of career education. During the summer of 1973, staff from each of the nine districts participated in workshops to prepare first draft curriculum materials for use in the respective school settings during the 1973-1974 school year.

The publications which follow were developed as part of the responsibility of project participants and staff to provide visibility to the findings and accomplishments of the project. These guidelines and instructional materials are provided at this time to assist local school personnel interested in initiating programs, services, and activities for their students.

Robert D. Benton

Robert D. Benton, Ed.D.
State Superintendent of
Public Instruction

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The content of this publication is based on experiences encountered by teachers and administrators in the exemplary project entitled "Models for Career Education in Iowa." Much credit is due personnel in the nine local schools who tested these procedures in their systems and provided the documentation needed to validate the implementation process. Appreciation is expressed for the assistance and contributions of project participants and staff in the development of this publication.

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Foundation of Education in America and Career Education

Our present system of public education has its roots in theories and concepts that came to this continent with the melange of educational experiences and educational backgrounds of the founding fathers and those who immigrated to this country. These theories and concepts have been analyzed by educators and formed into basic philosophic views concerning the purpose and function of education in our society. These philosophies of education can be identified in our present national system of education.

In the main, these philosophies all recognize the same goal of education--that of preparing the individual to find his place in his society and the world, realizing his destination of largest power, joy, and service. They differ greatly, however, in the approaches employed in achieving this goal through the educational process. These differences permeate all levels of our educational system and continually strive to exert the major emphasis in the educational process.

Herman Harrell Horne, an exponent of the idealistic approach to education states, "Education is the eternal process of superior adjustment of the physically and mentally developed, free, conscious, human being to God, as manifested in the intellectual, emotional, and volitional environment of man." Inherent in Horne's statement is that there is but one vast meaning running through all the facts of existence. Mental facts are both facts and meanings, while physical facts also have their mental meanings. One can conclude from an interpretation of this approach to education that the best approach to educating the individual is to prescribe a given schedule of educational experiences based on what is known to contribute to an understanding of this one vast meaning running through all the facts of existence. A curriculum that requires a given number of credits in English, mathematics, social studies, etc., as prerequisite to graduation; an educational process that places subject matter in the "limelight" of the daily learning experience; a learning environment that is dominated by the teacher, the person who, because of his or her experiences in life can create this understanding, are outgrowths of this approach to education.

Theodore Meyer Green, in describing the goal of education from a liberal education point of view states, "We can say that the goal of education is to prepare each individual, so far as his native endowment permits, to live well in his society and in the universe in which he finds himself; that that educational process is best which advances us most efficiently toward these goals; and that the academic community is best which best initiates and sustains this educational process." Implementation of this approach in education has led some educators to view the educational experience of the individual as needing to be very broad and general. Emphasis is placed on developing the individual's power to reason and think. The assumption is made that after having been exposed to and thinking through contrived learning experiences typical of those the individual will face in life, the learner will be able to analyze and solve problems confronting him as he establishes

himself and lives a personally satisfying life. Any educational process that might cause the individual to narrow the scope of his educational experience is frowned upon by these educators. While these educators recognize differences in abilities of individuals by suggesting that the goal of education is to prepare each individual, so far as his native endowment permits, they structure the educational process to meet the needs of those who can master the process. They suggest that while not all students can master the program of study, they can obtain from the process the best that can be offered them.

Robert Maynard Hutchins states that "What belongs in education is what helps the student to learn to think for himself, to form an independent judgment, and to take his part as a responsible citizen." As an advocate of the classical humanistic approach to education, he suggests that "if the object of the educational system is to help young people learn to think for themselves, it should help them think about the most important subjects, and these are discussed in the greatest works of the greatest writers of the past and present." He suggests that the school curriculum be based on the great books of Western civilization--the works of approximately one hundred writers from Homer to the present. He believes that as the student reads these books he learns how the great thinkers reasoned, thus learning to think independently. Hutchins believes that the doctrine of adjustment to the environment is radically erroneous. He suggests that it leads to a curriculum of miscellaneous dead facts. It leads to vocational training, which schools are not equipped to give and which misses the most important contribution that the schools can make. He continues by suggesting that it is more urgent that we notice that our mission here on earth is to change our environment, not to adjust ourselves to it. One wonders how it is possible for the individual to contribute to changing the environment without first becoming a part of it.

George F. Kneller, in writing of existentialism and education states, "For the existentialist, the real world is the world of the existing. We may describe carefully and scientifically the characteristics of a particular object or living thing--that "certain something" which constitutes its essence--but in order to know if it is genuinely alive or real, if it actually is, we must personally meet it, have an experience with it, become authentically involved with it." The existentialist believes that the individual is responsible for his own knowledge. It originates in, and is composed of what exists in the individual's consciousness and feelings as a result of his experiences and the projects he adopts in the course of his life. The liberal, nonstructured approach to teaching that was prevalent in our school systems two decades ago had its roots in existentialistic theories and concepts. Remnants of this approach to education are still visible in our present system of public education.

Alfred North Whitehead, an exponent of the realistic approach to education states, "Education is the acquisition of the art of utilization of knowledge. Pedants sneer at an education which is useful. But if education is not useful, what is it?" He points out that teachers

can pump into the minds of a class a certain quantity of inert knowledge. As an example, the child then knows how to solve a quadratic equation. But what is the point of teaching a child to solve a quadratic equation? The traditional answer runs thus: The mind is an instrument, you first sharpen it, and then use it; the acquisition of the power of solving a quadratic equation is part of the process of sharpening the mind. He points out that the mind is never passive; it is a perpetual activity, delicate, receptive, responsive to stimulus. He suggests that the difficulty with the concept is that the apprehension of general ideas, intellectual habits of mind, and pleasurable interest in mental achievement can be evoked by no form of words. There is no royal road to learning through an airy path of brilliant generalizations.

He continues by saying, "The solution which I am urging is to eradicate the fatal disconnection of subjects which kills the vitality of our modern curriculum. There is only one subject matter for education, and that is Life in all its manifestations. Instead of this single unity, we offer children--Algebra, from which nothing follows; Geometry, from which nothing follows; a Couple of Languages, never mastered; and lastly most dreary of all, Literature, represented by plays of Shakespeare, with philological notes and short analyses of plot and characters to be in substance committed to memory."

John Dewey, in defining education from a pragmatic point of view states that education is, "that reconstruction or reorganization of experience which adds to the meaning of experience, and which increases ability to direct the course of subsequent experience." He further points out that "In our search for aims in education, we are not concerned, therefore, with finding an end outside of the educative process to which education is subordinate. Our whole conception forbids. We are rather concerned with the contrast which exists when aims belong within the process in which they operate and when they are set up from without."

Out of this view of the purpose and function of education has emerged the problem approach to learning and the central focus of education on interests and abilities of the student. Dewey elaborates on this point by saying, "In learning, the present powers of the pupil are the initial stage; the aim of the teacher represents the remote limit. Between the two be . . . acts to be performed; difficulties to be overcome; appliances to be used. Only through them, in the literal time sense will the initial activities reach a satisfactory consummation." Inherent in the pragmatic approach to education is that the most effective education for the individual is that which provides purpose in learning by connecting the learner with the world around him.

As indicated earlier, all of these philosophic views of the purpose and function of education exist at all levels in our present system of education. What has developed as a result of the attempts of many educators to implement their philosophy of education in our system of public education is a form of education that has been referred to as "general education." It has been defined recently as that formal education

experience which (1) seeks to cause the student to be more human and humane, (2) attempts to free the student from ignorance, superstition, bigotry, and from narrow or shallow intellectual interests, (3) increases awareness of world cultures and of the hopes, aspirations, despairs, imagination and creative spirit of people everywhere, (4) develops the appreciation and use of the conceptual approaches to knowledge, criteria of theory, and the common standards of judgment and values, (5) causes one to be effectively literate and to develop a judicious habit of mind and a rational approach to decision-making, and (6) sharpens the discipline and desire to engage in a lifetime of self-directed learning.

Such a definition of education is easily understood as one can identify various philosophic viewpoints expressed in the definition. Careful analysis of the definition suggests that it is a process which states goals for the learner and assumes that the learner is in agreement with and accepts these goals. No part of the definition recognizes the feelings, interests, and goals of the learner as he perceives them.

This approach to education has dominated the educational scene in this country for the past half century. To say that it has been unsuccessful in educating our youth would be quite erroneous. Our system of education has been successful in meeting the educational needs of our youth who wanted it and could benefit from it. It has contributed to making our people the most affluent in the world and our nation a leader among nations in the world. Certain questions arise, however, concerning the real impact of this approach to education and its effect on the learner. Why do we observe students dropping out of school before graduation? Why are high school graduates increasingly terminating their education at the twelfth grade? Why are an increasing number of students enrolling in terminal programs operated by vocational-technical schools to learn a skill that will prepare them to enter and become a part of their society and environment through their work? Why is apathy in the classroom such a major problem in education at all levels and among both students and teachers? How has this approach adjusted to the educational influences of society? It is an approach to education that cries out against the teaching of dead facts and objects to a narrow approach to education, yet what has it done to make certain that its facts are new and reflect on the needs of our society and more importantly our youth as they prepare to enter society. Some would argue that it has made changes in content, but upon close scrutiny, it is the structure or the framework in which the educational process operates that has attempted to make changes. The facts being taught are the same. As the definition points out, one of its purposes is to cause the student to be more human and humane, yet the structure in which the process operates is very rigid, demanding almost complete conformity on the part of the learner, thus inhibiting the development of creativity and humaneness in the individual.

With each of the above philosophic points of view exerting its influence in our system of public education, one wonders how the process can be effective in meeting the educational needs of the learner. The attempted implementation of the different educational philosophies in our

system of public education has caused divisiveness among educators at all levels. Dr. Sideny Marland, former U. S. Commissioner of Education, in a speech entitled, "Career Education Now," given before the National Association of Secondary School Principals in Houston, Texas, in 1971 commented on this divisiveness. He said, "We must purge ourselves of academic snobbery. For education's most serious failing is its self-induced, voluntary fragmentation, the strong tendency of education's several parts to separate from one another, to divide the entire enterprise against itself."

For the most part, the preparation of the individual to enter the world of work is not a part of the philosophies of education presented above. In the main, they scorn the idea of developing the individual's ability to do work whether it be with his hands or his head. Yet, in our complex technological society, it is through work that we are able to realize those goals of "largest power, joy, and service."

The concept of work is a part of, and permeates all of, the educational philosophies discussed above both in the individual's process of learning, his entry into and ability to live well in his society and the universe in which he finds himself. In our society, the work of the individual dominates approximately two-thirds of his time spent in living the good life. The question arises, what is the school doing to prepare the individual to enter and become a part of his society through his work? Does it provide the learner with those skills necessary to make wise career decisions and prepare for occupational entry into the world of work? There are those who suggest that because of the rapid change that characterizes the world of work, it would be erroneous to suggest to the learner that he select a career early in his schooling and begin his preparation for entry into that career. They say, "In ten years that career may not exist in the world of work." Typical of the writings relative to this line of reasoning is that found in the February 1973 issue of the Phi Delta Kappan in an article entitled "Career Education: Earning a Living or Living a Life?" The author writes, "Because of the instability of the economy, careers go in and out of fashion, and an occupation that seems so attractive and permanent in 1972 might be non-existent in 1978 . . . (Therefore) educators will have to consider the value of skills which may be proving, questioning, non-instrumental . . . These non-occupational skills will necessitate a curriculum that helps students to think about issues and problems, aids them in clarifying their value confusions, and urges them to consider and act upon workable alternatives to the corporate system as it is."

The argument presented above against occupational education has some merit, but overlooks one important fact. As Whitehead would suggest, "Can such a situation or viewpoint represent Life, as it is known in the midst of the living of it?" Students, after graduation, will not wait ten years to enter those occupations that will be in existence in 1978 or 1985. They look forward to and will enter the world of work upon leaving school, whether it be as a dropout, a high school graduate, an area vocational or technical school graduate, or a college graduate. It is not hard to imagine the state of affairs that would exist if all

graduates waited until those new emerging occupations came into existence before they entered the world of work. History has taught us that we do not think ourselves into occupations. We qualify ourselves for them by developing those skills that make us proficient in the occupation, whether it be a professor, plumber, farmer, scientist, carpenter, or doctor. Preparing the learner for entry into the world of work should be one of the objectives of our educational system. The Ten Imperative Needs of Secondary School Youth, written in 1947, states this as one of the needs to be met by the school in Imperative Need Number One.

The emphasis being placed on career education in this country has aroused many educators to the point of expression. As with any innovation, the concept has been received with mixed reactions on the part of the educational profession. Those who express alarm and concern about the concept tend to be those who have different philosophic beliefs concerning the role and function of education. They fear that education will become oriented to meeting the needs of the labor market, thus deemphasizing the development of those basic skills needed by all individuals in life. A point often overlooked by these people is that those basic facts for which they are concerned are just as important to the individual in his work after leaving school as are the occupational skills. The career education concept proposes that it is the responsibility of the total school curriculum to provide opportunities for the student to develop a complete set of skills that will assist him in finding his place in society after graduation. Dr. Marland emphasizes this point in the same speech when he says, "It is terribly important to teach a youngster the skills he needs to live, whether we call them academic or vocational, whether he intends to make a living with a wrench, or a slide rule, or folio editions of Shakespeare. It is critically important to equip that youngster to live his life as a fulfilled human being."

In summary, the current emphasis on career education is the reaction of some educators and the citizenry to procrastination. Educators who support the concept are suggesting that our system of education honor its commitments by assisting the learner in making wise career decisions that will contribute to a personally satisfying life and a place in society. These same educators are suggesting that the school structure and the curriculum become sensitive to the interests and needs of the learner as an individual and harmonize this concern with a recognition of the honorable and essential social concepts of the work ethic.

Career Education and the School Curriculum

Any innovation in education brings with it changes in the existing school program and structure. In the past, some of these innovations have suggested, even demanded major changes in the system over a relatively short period of time. Implementation of the career development concept in the school curriculum will also encourage or cause changes. Including the concept in the learning experiences of the student will not, however, solve all the problems confronting the educational profession nor will it require a major restructuring of the school system. It proposes change from within the educational system developed and directed by classroom teachers and school administrators, based on the needs of their students and communities. The concept supports the existing program of study by providing a realistic environment for the learner to develop those mental, physical, and social skills needed to lead a personally satisfying and productive life after leaving school by relating the subject matter studied to the world surrounding the learner. It contributes to an atmosphere of creative learning and teaching as a result of expanding the classroom beyond its four walls, the two covers of a textbook, and the six periods of the school day.

Implementation of the career development concept is a function of the total school curriculum. It reaches into and is a part of all that goes on within the school. This is necessary if it is going to avoid the wayward path of many other educational endeavors and conclude becoming just another "fad" in education. The schema on the following page illustrates the function of the school curriculum in implementing this concept.

As has been pointed out earlier, it is the goal of education to prepare the individual to find his place in his society and the world, realizing his destination of reaching his goal of largest power, joy, and service. In order for the individual to attain this goal, he must be able to establish and maintain that life style unique to his personality, interests, and abilities which will permit him to realize his largest power, joy, and service and place in our society. Rudimentary to achieving this goal is his career. It serves as the mechanism through which he is able to achieve these goals. The curriculum in the school, then, should assist the individual in selection of, preparation for, and entry into a career and establishment of a life style that will permit him to find his place in society and make a contribution to it.

In order for the individual to become established in a career, he must possess certain skills. As was suggested earlier, we don't think ourselves into occupations, we prepare or qualify ourselves for such by developing those skills that make us proficient and employable in an occupation. When one analyzes the kinds of skills that are needed to make the individual proficient and employable, the conclusion is quickly drawn that they are both mental and physical, quite broad in scope, and involve every program in the school curriculum in their development. As is suggested in the illustration, it is the responsibility

SOCIETY
LIFE STYLE
CAREER
COMMUNICATIVE
COMPUTATIONAL
SUPPORTIVE
JOB
SOCIAL
PHYSICAL
APPRECIATION
SKILLS
CURRICULUM

of the language arts program to develop the communicative skills; the mathematics program to develop the computational skills; the social science program to develop the social skills; the science program to develop those supportive skills; the physical education program to develop the personal fitness skills; the fine arts program to develop the appreciation skills; and the vocational program to develop the specific job skills leading to employability and the subsequent life style chosen by the individual.

One might conclude, after studying the above schema, that it is the sole purpose of the curriculum to prepare the learner for a career. This is not what is intended. What is inferred is that it is one (among many) of the purposes of the school curriculum and that educators should address themselves to meeting this need as they plan their programs of study.

Becoming Familiar with the Career Development Concept

Before a school system decides to implement the career development concept in its program of studies, personnel in the school should become familiar with the concept. Too often in the past educators have attempted to implement an innovation in the school system without fully understanding what they were attempting to achieve. As a result the idea concluded in failure. The same outcome could result with this concept if it is not thoroughly understood before a school faculty attempts to implement it in their system.

An exhaustive review of the literature should be conducted on the subject and visits made to school systems that are implementing the concept in their curricula. Career education programs are being conducted in all fifty states of the union. These programs can be identified through the Iowa State Department of Public Instruction, Career Education Division, and direct contacts made with them by the local school. Literature provided on these programs should be scrutinized to determine the concept being implemented and where they are making their major thrusts in the educational process. Literature received from these programs should be catalogued and filed for use by all school staff members during the in-service phase of the implementation process developed for school staff personnel.

Because of a lack of a national definition of career education and direction for its implementation in the school system, programs across the nation have approached implementation of the concept differently. Some are oriented solely to the world of work and occupations, while others approach career education through the self-actualization process. Several programs view career education as another subject-matter area and are attempting to structure it as such in the school curriculum. In some programs, career education is viewed as being synonymous with vocational education and in these programs efforts are underway to extend the secondary vocational effort in the school into the junior high

and elementary grades. Still others look upon career education as an interdisciplinary effort designed to develop a positive self-understanding and an understanding of the world of work, with the thrust being placed on the process of student decision-making relative to a career. These programs will provide much useful background information upon which the local school can begin to formulate its concept of career education and its methods of implementation.

The most valuable source of information on the subject can be supplied by schools who are engaged in implementing the concept in their school systems. Staff members from local districts planning to implement the concept in their school system should visit these schools to obtain firsthand information about their concept of career education, how they have organized to implement the concept, and problems and successes they have encountered. When visiting one of these schools, contacts should be made with teachers, students, administrators, parents and community representatives if a true picture of what the school is doing in career education is to emerge. In the main, these schools are willing to share their experiences with other schools and will, when possible, provide members of their staff as resource personnel for local districts as they implement the concept in their school systems.

Defining Career Education

The first step that must be taken in building the career education concept into the school curriculum is that of defining the concept. A tentative definition should be developed by a task force of from six to eight faculty members representing the primary, intermediate, junior high, and secondary instructional levels. The definition that a school system eventually decides upon should be stated in clear, concise terms and should involve the thinking of teachers and administrators from all levels and disciplines, guidance personnel, parents, students, and community representatives as it is being defined. A thorough review of the literature on the subject of career education should precede defining the concept, meeting the needs, interests, aptitudes, and abilities of the student should be uppermost in the minds of those working on the definition.

While there are many definitions of career education, one that serves as an example of a definition generated using the above process is provided below.

> Career education is a sequence of planned educational activities designed to develop positive student attitudes, values, knowledges, and skills toward self and the world of work that will contribute to personal fulfillment in present and future life opportunities as well as economic independence. Career education, when incorporated into the existing curriculum, has as its goal the creation of positive

career objectives through the involvement of community resources and educational agencies.

The above definition has three distinct features. First, it focuses the efforts of the educational process on the student. Second, it recognizes the concepts of self and world of work as basic to the career development process. Third, it states that the implementation of the concept is a function of the total school curriculum and involves the input of community resources.

Conceptualization of Definition

Once a school faculty has developed a definition of career education, it is imperative that they conceptualize how the definition will permeate the school structure and curriculum. At the time the task force develops the tentative definition for career education, it should develop a model showing how the definition fits into the school structure. An example of how the defintion presented in the previous section was conceptualized and incorporated into the school structure is provided on the following page. This model is described and discussed in depth in the publication entitled "Career Development Model and Explanation" which is one in the series of publications developed as a part of the project entitled "Models for Career Education in Iowa."

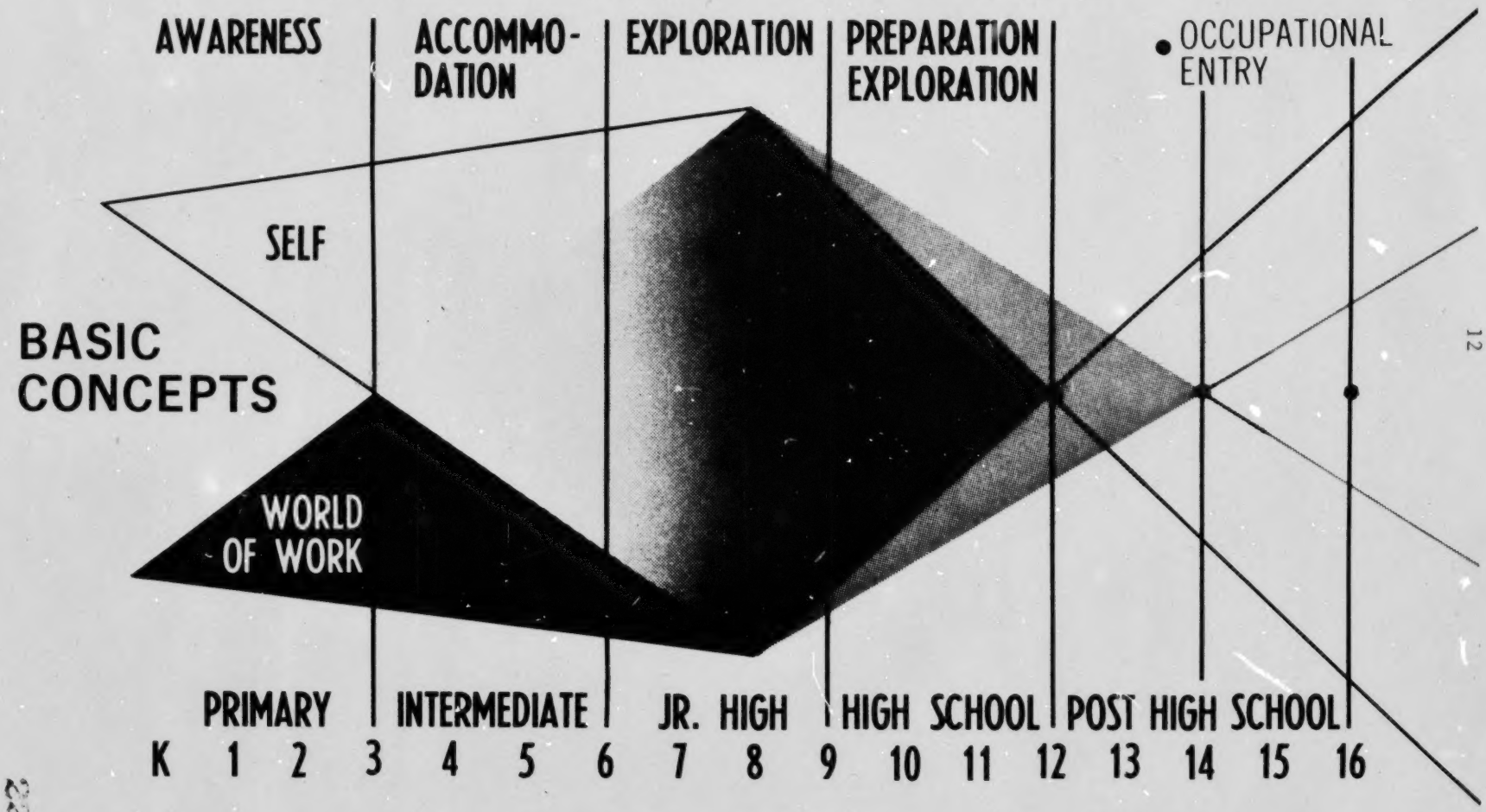
In-service Program on Career Education

The initiation of an in-service education program for the school staff and the community devoted to the concept of career education is crucial to the successful implementation of a sound career development effort in the curriculum. This program should be organized and carried out under the direction of the school coordinator of career education and should involve all staff members in the system.

The concept and its role and function in the school curriculum should be thoroughly explained and discussed with all faculty members. This will require several meetings of the faculty as a whole and many small group meetings. During this process, teachers should be encouraged to study the literature collected on other programs and placed on file in the school earlier in the orientation process. The use of qualified outside resource personnel in discussing and explaining the concept will greatly enhance this process. Caution should be exercised, however, in the choice of individuals invited to speak to the school staff. They should (1) espouse the approach to career education that the school feels should be implemented in their system (the review of literature should provide clues to individuals who would be logical choices as resource persons), (2) be very familiar with educational processes in

MODEL FOR CAREER DEVELOPMENT

CAREER DEVELOPMENT PHASES



Developed as part of Career Education Project, Iowa State University

the school and understand the processes of change in public education, (3) be able to communicate with teachers at all levels. Many fears and misconceptions will develop on the part of the faculty until they thoroughly understand the concept and how it fits into the curriculum and their course of study. These fears can be partially dispelled by careful selection and use of resource persons.

After the concept has been thoroughly explained and discussed by the school staff, the staff should begin the process of developing strategies for implementing the concept in their system. The definition written by the task force should be thoroughly analyzed by all staff members, administrators, guidance personnel, students, parents, and community representatives. Their suggestions for changes should be incorporated into the tentative definition and a final definition derived. When the final definition has been written, the school staff should analyze the tentative model, revising it to reflect the changes that were made in the definition.

When the career development concept is understood by all faculty members, in-service activities for staff must turn to implementing the concept in the classroom. To be more specific, the concept should be structured to student interests and needs, teachers' courses of study, and daily instructional activities. This will entail many small-group meetings among teachers at each instructional level (primary, intermediate, junior high, and secondary) and between instructional levels. Every effort should be made by those directing the planning process to prevent the emergence of four separate career development programs--one at each instructional level. Implementation strategies should be planned to provide scope and sequence of career development activities in the curriculum leading to a smooth articulation of the concept beginning in the kindergarten and continuing through the twelfth grade. Career education activities planned at each grade level should be geared to the stage of development being experienced by the student during the period of his emotional, social, intellectual, and physical development. It is highly recommended that personnel from the child development discipline be used as resource people to work with faculty members at all levels in developing an understanding of this process.

No concept of career education can be complete if it does not recognize the "self-concept" as one of the basic components. This concept and its role and function in the career development process is discussed in detail in the publication entitled "The Self-Concept in the Career Development Process" which is one in the series of publications developed in the project entitled "Models for Career Education in Iowa." The concept is fairly easy to understand, but most difficult to implement in the curriculum and classroom. One can conceptualize what components should be covered in the classroom to develop a positive self concept, but it is difficult to convert these components into teaching strategies, learning experiences and desired student outcomes.

Experience has taught that the first step in implementing this concept is to develop a positive self-concept on the part of the teachers.

Through experiencing the development of a positive self-concept, the teacher is more sensitive to the scope and breadth of the self-concept components that are to be implemented in his or her classroom instruction. Ample time should be provided for developing a positive self-concept by all teachers as a part of the career education in-service program. If this concept is not fully understood before the implementation of the career education program begins, problems will arise and the progress of the program will have to be halted until it is understood. Here again, resource people can be used most effectively in developing an understanding of this concept.

The in-service education program should include a thorough analysis of the world-of-work concept and how it fits into the school curriculum. This concept and its role and function in the career development process is discussed in detail in the publication entitled "The World-of-Work Concept in the Career Development Process," which is one in the series of publications developed as a part of the project entitled "Models for Career Education in Iowa." Emphasis should be placed on the use of the cluster concept of grouping occupations and the ways in which this concept can be built into each program of study within the curriculum. Teachers most likely will find this a new experience and will need much help in interpreting the concept and adapting it to their program of study. Caution should be exercised to avoid forcing students to choose a career in the elementary grades and prepare for occupational entry into that career during the remainder of their schooling. A thorough understanding of the developmental process that the learner experiences as he grows to maturity will be of much value to teachers as they integrate the world-of-work concept into their instructional programs.

To completely prepare a school staff for implementing the career development concept in the curriculum will require the major part of one school year. A school system that carries out a well-planned in-service program for its faculty prior to actual implementation of the concept in the curriculum will reap great rewards during the implementation phase of their program.

Formulating Career Development Objectives

Having defined and conceptualized the career development concept that a school system wishes to implement in their curriculum, the faculty will be faced with transforming the concept from theory to practice. This gap is bridged through the use of educational objectives. For each phase of career development, educational objectives should be written that will, when implemented, develop those concepts considered basic (self and world-of-work) to the overall career development process. Objectives should be developed congruently within the developmental process that the learner experiences as he grows to maturity, provide purpose and direction for the phase of career development for which they are being written, and be written for use at the curriculum level. They should describe clearly the overall concepts to be included in each phase of

career development and suggest specific areas of concern to be dealt with in the curriculum. The curriculum level objectives provided below identify these components for the "Exploration and Preparation" phase of the career development model presented in the previous section of this publication.

Exploration and Preparation Phase

High School Level

Program Objective:

During the Exploration and Preparation phase of career development, the learner will attain qualities for employment in the world of work, including attitudes, values, and skills to the extent necessary for economic independence and personal fulfillment.

Self Concept

The learner utilizes personal aspirations, experiences, values, and abilities to give orientation and direction to own dynamic self concept.

- Refines personal interests (both awareness and judgment)
- Correlates personal aspirations and life style to own mental and creative abilities
- Conceptualizes the importance of own physical abilities potentials
- Synthesizes and develops plan for achieving personal goals
- Considers emotional characteristics as a function of own total being
- Evaluates image of self as perceived by himself and others
- Recognizes the dignity of all human beings
- Recognizes that all societies have formal and informal controls on human relations
- Assesses personal values in terms of human needs
- Recognizes and utilizes the educational setting (home, school and community) as an aid in developing life skills
- Assesses and manages own behavior in terms of personal value system and societal expectations
- Effectualizes personal modes of learning, management, actions, and operation
- Effects decisions and analyzes consequences of those decisions
- Evaluates personal competencies such as experience, education, and skills
- Evaluates own abilities, personal qualities, aspirations, and values and their interrelationship to each other

World of Work

The learner evaluates specific behaviors and social economic aspects of the world of work

Recognizes that in a service oriented society, work consists of activities which allow the individual to fulfill personal needs and those of society

Analyzes organization within the work force
Continues exploration of occupational areas while doing an in-depth analysis of areas of interest
Examines the interrelatedness of skill requirements for similar occupations
Recognizes the dynamic nature of the work force
Recognizes the interdependency between the individual's and society's needs, and their implications for work
Analyzes and experiences the economic aspects of the world of work
Recognizes the educational setting as one of the places which provides for development of computational, communications, leisure, human interactional skills necessary for involvement in the world of work
Develops competencies in seeking employment
Considers the economic impact of national policies on the availability of jobs.

Self and the World of Work

The learner analyzes modification of career patterns, makes career plans and prepares for entry into the world of work as a function of time and a developing self-identity.

Analyzes personal characteristics as they relate to areas of interest
Explores selected occupational areas in depth and begins preparation for occupational entry into occupational area(s)
Recognizes that personal characteristics and values change as career progresses
Prepares for job entry into selected occupational area(s)
Evaluates personal preferences in types of work and leisure, and the balance therein as influenced by demographic, occupational, and preparational level components

To insure scope and sequence of educational experiences throughout the career development process, the specific components inherent in each of the basic concepts should be identified and structured to the developmental process that the learner experiences at each instructional level

and the learner's interests, needs, and abilities. These components should be included in each phase of career development. The following examples illustrate the scope and sequence of educational objectives for a component in the self and world of work concepts.

Career Development Phases	Objectives
Self-Concept	
Awareness	Recognizes that human beings are more alike than different
Accommodation	Recognizes variations in attributes of self, peers, and adults
Exploration	Recognizes reasons for variations in personal characteristics of self and classmates
Exploration and Preparation	Recognizes the dignity of all human beings
World-of-Work Concept	
Awareness	Becomes aware of similarities among occupations
Accommodation	Comprehends the similarities and relatedness of occupations
Exploration	Examines clusters of occupations
Exploration and Preparation	Examines the interrelatedness of skill requirements for similar occupations
Self and the World-of-Work Concept	
Accommodation	Describes the personal growth and rewards of work and/or leisure
Exploration	Recognizes that there is continual personal change during career development
Exploration and Preparation	Recognizes that personal characteristics and values change as careers progress

In each of the above illustrations, the same component of career development is described in the objectives. An analysis of the objectives reveals a smooth articulation among career development phases of these components that is consistent with the learner's developing maturity, the phases of career development, and the instructional process in the school. Throughout the process of writing curriculum level objectives for each phase of career development, articulation of concepts--the

connecting of concepts that are planned for one grade level with those that have been planned to precede and follow them at other grade levels--should be a major goal of those developing the objectives. Numerous group meetings and discussions among teachers at all levels will be required to achieve this goal. If effective planning is to take place, answers will need to be provided to such questions as: What are the self and world-of-work components that should be included in each of the basic concepts? Are these components congruent with the needs and interests of the students they are to serve and if not what components should be added and/or deleted to meet these needs? What should each component emphasize at each instructional level? How should these components be developed so that they are parallel with the developing maturity of the learner at the elementary, intermediate, junior high, and senior high school levels?

After the faculty has completed its task of developing curriculum objectives that, when implemented, will integrate the career development concept in the school curriculum, the objectives should be reviewed by members of the community, parents, students, and specialists in education and related disciplines. Their suggestions should be analyzed by the school faculty and, where deemed appropriate, changes made in the original objectives. The objectives should be scrutinized closely by faculty members as they are used and revised when necessary.

A complete set of objectives for each phase of career development identified in the model in the previous section are provided in the publication entitled "Career Development Model and Explanation" which is one in the series of publications developed as a part of the exemplary project entitled "Models for Career Education in Iowa."

Integrating Curriculum Objectives into Present Course of Study

Once a list of curriculum objectives has been developed, the task that the school faculty will be confronted with is integrating these objectives into the instructional program. Teachers within each instructional level will need to review the list of objectives developed for their level of instruction (primary, intermediate, junior high, and senior high) and decide which objectives they can satisfy through their instructional program. As decisions are made concerning which objectives each teacher will take responsibility for implementating consideration should be given to (1) how and where the objectives can best be integrated into their course(s) of study and (2) which objectives best lend themselves to meeting the students' interests and needs. In some school systems, student needs may dictate that all objectives be included in the instructional program at each grade level, while in other systems these needs can be met by integrating only part of the objectives into the instructional program at each grade level. The decision as to what objectives should be included in the instructional program at each grade level and in each course of study must rest with

the teacher. It is important, however, that all objectives for a given instructional level be included at one of the grade levels within the instructional level.

After the teachers within each instructional level have made their decisions concerning which objectives will be implemented in their instructional program, each teacher must decide where the career development objectives can most logically be built into his or her course(s) of study. This will require a thorough review and analysis of the present course(s) of study to determine (1) the overall purpose and content of the course(s), (2) whether student needs are being met through the course(s), (3) what changes are needed in the course(s) to better meet student needs, and (4) how the objectives and units of instruction of the course(s) can be altered to include the concepts inherent in the career development objectives. Caution should be exercised to avoid changing the emphasis of the course(s). Integration of the career education objectives should support the development of those skills being empahsized in the course(s), and at the same time stress the career development concepts inherent in the career education objectives. The following examples illustrate how teachers should approach building the career development objectives into their course(s) of study.

Grade Level -- Sixth

Career Development Objective
Recognizes own developing mental and creative abilities in terms of an evolving life style

Course
Language Arts

Unit of Instruction
Creative Writing--Write an autobiography

Grade Level -- Eleventh and Twelfth Grade

Career Development Objective
Recognizes that personal characteristics and values change as careers progress

Course
Contemporary Literature

Unit of Instruction
Unit 1 -- Personal Identity

Grade Level -- Seventh, Eighth, and Ninth

Career Development Objective
Identifies the implications of the concept of leisure time, vocation, and avocation as they relate to a person's needs in life

Course
Physical Education
Unit of Instruction
Table Tennis

Grade Level -- Grade One

Career Development Objective
Expands the concept of work to include paid and unpaid work
Course
Health
Unit of Instruction
Unit 4 -- Your Teeth and the Dentist

Below is an example of how the intermediate level teachers in one school assigned the accommodation phase objectives written for the career development model presented in the section entitled "Conceptualization of Definition" to specific grade levels and courses of study.

FOURTH GRADE

General (included in all subject areas)

1.00 The learner recognizes interactions with others and increasing knowledge and skills as continually influencing own self-concept
1.10 Sees that the educational setting (home, school, community) can help one to know own strengths and weaknesses and to develop life skills
1.2 Recognizes own developing mental and creative abilities in terms of an evolving life style
1.4 Becomes aware of future goal possibilities
1.1 Analyzes present interests as a basis for development of new interests
2.4 Comprehends the similarities and relatedness of occupations

English
2.9 Recognizes the relationship between the world-of-work and the educational setting (family, community, school)
3.4 Relates life styles to work roles

Physical Education (Fourth, Fifth, and Sixth Grades)

1.3 Recognizes physical abilities
1.4 Becomes aware of future goal possibilities
1.7 Recognizes variations in attributes of self, peers, and adults
1.13 Acquires experience in making decisions and accepting the consequences of the decisions
3.3 Describes the personal growth and rewards of work and/or leisure

FIFTH GRADE

Mathematics

1.1 Analyzes present interests as a basis for development of new interests
2.1 Expands the concept of work to include paid and unpaid work
2.3.2 Observes qualities desirable for various occupations
2.5 Realizes that work responsibilities change within occupations due to technology and personal competencies
3.1 Relates personal aptitudes to various related careers
3.2.2 Identifies opportunities afforded through community activities
3.4.2 Realizes that monetary rewards affect life styles

English and Spelling

1.1 Analyzes present interests as a basis for development of new interests
1.4 Becomes aware of future goal possibilities
2.6 Recognizes that various rewards may come from work
2.8.2 Compares the effects of supply and demand factors in the labor market in job availability, pay, and work roles
2.9 Recognizes the relationship between the world of work and the educational setting (family, community, school)
3.1 Relates personal aptitudes to various related careers
3.4.5 Recognizes that occupations and their resulting life styles may affect physical and mental health

Social Studies

1.1 Analyzes present interests as a basis for development of new interests
1.11 Recognizes and performs appropriate behaviors for the community setting
2.2 Recognizes that occupational areas have different levels of responsibility
2.3.2 Observes qualities desirable for various occupations
2.4.1 Recognizes mobility in career lattices
2.5 Realizes that work responsibilities change within occupations due to technology and personal competencies
2.7 Recognizes the contributions of work to a functioning society
2.8.3.1 Describes how income varies with career type and level
2.8.3.4 Recognizes the implications of discrimination (racial, sex, age, cultural)
2.9 Recognizes the relationship between the world of work and the educational setting (family, community, school)
3.1 Relates personal aptitudes to various related careers
3.3.7 Recognizes that monetary rewards may come from work
3.4.3 Realizes that work hours affect life styles

Reading

1.3 Recognizes physical abilities
2.8.3.4 Recognizes the implications of discrimination (racial, sex, age, cultural)
3.3.5 Acknowledges that social recognition may be related to work
3.3.6 Describes the satisfactions gained when personal capabilities are effectively used in work and/or leisure

Science

1.1 Analyzes present interests as a basis for development of new interests
1.11 Recognizes and performs appropriate behaviors for the community setting
2.1 Expands the concept of work to include paid and unpaid work
2.3.2 Observes qualities desirable for various occupations.
2.5 Realizes that work responsibilities change within occupations due to technology and personal competencies
2.9 Recognizes the relationship between the world of work and the educational setting (family, community, school)
3.1 Relates personal aptitudes to various related careers
3.4.2 Realizes that monetary rewards affect life styles

SIXTH GRADE

Reading

1.1 Analyzes present interests as a basis for development of new interests
1.2 Recognizes own developing mental and creative abilities in terms of an evolving life style
1.5 Appraises feelings toward self, peers, adults, and near environment
1.10 Sees that the educational setting (home, school, community) can help one to know own strengths and weaknesses and to develop life skills
1.13 Acquires experience in making decisions and accepting the consequences of the decisions
2.4 Comprehends the similarities and relatedness of occupations
2.5 Realizes that work responsibilities change within occupations due to technology and personal competencies
2.6 Recognizes that various rewards may come from work
2.8 Investigates the economic factors which influence the life of the individual in the world of work
3.1 Relates personal aptitudes to various related careers
3.2 Chooses activities which will utilize personal interests and abilities in making contributions to school and community
3.2.1 Identifies opportunities afforded through school programs

3.2.3 Uses the decision making process in choosing projects commensurate with own abilities and interests

Language

1.7 Recognizes variations in attributes of self, peers, and adults
1.10 Sees that the educational setting (home, school, community) can help one to know own strengths and weaknesses and to develop life skills
2.3.1 Fantacizes work roles which could lead to desired life styles
2.5 Realizes that work responsibilities change within occupations due to technology and personal competencies
3.2 Chooses activities which will utilize personal interests and abilities in making contributions to school and community
3.2.1 Identifies opportunities afforded through school programs
1.1 Analyzes present interests as a basis for development of new interests
3.4 Relates life styles to work roles
3.4.1 Describes a life style
3.4.3 Realizes that work hours affect life styles
3.3.1 Recognizes that personal satisfactions may come from work

Social Studies

2.9 Recognizes the relationship between the world of work and the educational setting (family, community, school)
3.4 Relates life style to work roles
3.4.1 Describes a life style
3.4.3 Realizes that work hours affect life styles
3.3.1 Recognizes that personal satisfactions may come from work
2.7 Recognizes the contributions of work to a functioning society
3.1 Relates personal aptitudes to various related careers
2.4.1 Recognizes mobility in career lattices

Mathematics

2.9 Recognizes the relationship between the world of work and the educational setting (family, community, school)

Health and Science

2.9 Recognizes the relationship between the world of work and the educational setting (family, community, school)
1.1 Analyzes present interests as a basis for development of new interests
1.5 Appraises others' perception of self
1.6.1 Copes with praise and criticism from adults and peers in positive manner
1.10 Sees that the educational setting (home, school, community) can help one to know own strengths and weaknesses and to develop life skills

1.7 Recognizes variations in attributes of self, peers, and adults
3.3.1 Recognizes that personal satisfactions may come from work
3.3.2 Distinguishes the need for personal satisfaction in work or leisure to maintain mental and physical well-being

Reading

2.9 Recognizes the relationship between the world of work and the educational setting (family, community, school)
3.2.3 Uses the decision-making process in choosing projects commensurate with own abilities and interests
3.4.1 Describes a life style

Science

1.7 Recognizes variations in attributes of self, peers, and adults
1.10 Sees that the educational setting (home, school, community) can help one to know own strengths and weaknesses and to develop life skills
2.4 Comprehends the similarities and relatedness of occupations
3.2 Chooses activities which will utilize personal interests and abilities in making contributions to school and community
3.2.1 Identifies opportunities afforded through school programs
3.2.3 Uses the decision-making process in choosing projects commensurate with own abilities and interests.

Mathematics

1.7 Recognizes variations in attributes of self, peers and adults
1.10 Sees that the educational setting (home, school, community) can help one to know own strengths and weaknesses and to develop life skills
2.4 Comprehends the similarities and relatedness of occupations
2.4.1 Recognizes mobility in career lattices
2.5 Realizes that work responsibilities change within occupations due to technology and personal competencies
3.2.1 Identifies opportunities afforded through school programs
3.2.3 Uses the decision-making process in choosing projects commensurate with own abilities and interests

An analysis of the assignment of the above objectives to grade level and course of study reveals that all intermediate career development objectives were included in the instructional programs of these three grade levels. It is further observed that (1) some objectives were included at all three grade levels while others were assigned to a specific grade level, (2) objectives were assigned to all subject matter areas included in the program of study for each grade level, and (3) objectives were structured to the developing personal, social, and

educational needs of the learner. Also revealed in the assignment of the objectives is the unique contribution that the area of instruction can make in assisting the learner through the career development process.

In the general objectives for each course of study, two points are identifiable. First, in each set of course objectives, emphasis is placed on assisting the learner with specific educational processes through the subject matter to be studied. Second, both the subject matter and career development concepts to be included in the content of the course are described. While the course objectives were written by teachers, they follow Dewey's approach to learning when he states that "the present powers of the pupil are the initial stage; the aim of the teacher (or pupil) represents the remote limit."

If the efforts of a school faculty in implementing a career development process within its curriculum are to be lasting, thus avoiding the fate other educational innovations have suffered in the past, much thought and time must be devoted to analyzing and reorganizing program(s) of study to include the basic career development concepts appropriate to his or her grade level and students' interests and needs. Once well conceived, sound course objectives have been written that include these concepts, instructional objectives and classroom learning activities will be easy to identify and develop.

As was mentioned earlier, the assigning of career development objectives to specific courses of study will require a thorough review of the purposes and content of the courses before a decision can be made as to which area, or areas, of instruction each of the career education objectives can be integrated. Once these decisions have been made, the course description, course objectives and units of instruction should be revised to reflect the integration of the career development concepts inherent in the career development objectives assigned to that course. The following examples illustrate how the program of study in several subject matter areas were revised to reflect the inclusion of the career development concepts in school systems integrating career education into their curricula.

Course: Reading

Grade Level: Fourth

General Objectives:

Review and expand decoding skills.
Review and expand vocabulary skills.
Develop an understanding of author's message.
Assist the individual in developing a sound value system.
Develop an appreciation for and understanding of good literature.
Develop an understanding and appreciation of the pluralistic nature of American society and study of careers of our society.
Develop an understanding of the role and application of language (reading, writing, listening, and speaking) in everyday life and the world of work.
Develop the ability to locate and organize information and use visual materials.

Teaching Units:

From Sea to Shining Sea
Other Places, Other People
Could It Be Magic?
The Workaday World
Before You Were Born
Magic of Old
Book-Length Story

Basic and Supplementary Materials:

Reference books
Skills handbook
Supplementary texts and library books
Self-Help Activities
Magic-Circle Books

Course: Physical Education

Grade Level: Seventh, Eighth and Ninth

General Objectives:

To help the individual understand what his or her body is capable of doing, and to enable him or her to make maximum use of this information, yet realizing his or her limitations.
To provide the student a means of self-expression, as an individual or in a group.
To help the student understand and appreciate the worth of others and their limitations.
To provide the student with opportunities to develop and maintain organic power, strength, agility, and endurance in an effort to achieve physical fitness.
To provide opportunities for stimulation and satisfaction through release of the student's energy, both physical and emotional.
To develop desirable social attitudes in group relationship through the medium of game and play activities under the administration of trained leadership.
To develop the student's desire to appreciate and acquire physical skills which may be enjoyed as recreational.
To develop correct postural habits and the ability to relax.
To develop an appreciation of the wise use of leisure time and how to use this time appropriately.
To become aware of the role of physical fitness in the world of work.
To develop those basic fitnesses that are prerequisite to entry into the world of work.

Teaching Units:

Flag football
Speedball
Wrestling or Basketball
Bowling
Gymnastics-Tumbling
Self Testing
Volleyball
Recreational Games
Track and Archery
Softball or Tennis

Basic Materials

Gymnasium shoes, white socks, gym suits, trunks, and reversible blue and yellow shirts.

Course: English Experiences

Grade Level: Tenth

General Objectives:

Provide for the student's individual interest and ability in the study of language, literature, and composition.
Develop within the student a better understanding of himself and his environment.
Increase the student's competence in four basic skills of language; reading, writing, listening, speaking.
Encourage the student to participate in worthwhile leisure-time activities, skills, and interests.
Develop an understanding of the importance of reading, writing, listening, and speaking in the individual's life and work.
Explore careers related to English.

Teaching Units:

Composition
Creative Writing
Independent Study
Individualized Reading
Language
Print Media
Reading Laboratory
Thematic Unit -- Mankind Together
Thematic Unit -- War and Peace
Vocational English
Individualized Grammar

Basic Materials:

Play of Words, Harcourt Brace
English Everywhere, Globe
Vocational English, Globe
War and Peace, McDougal Littel
Together, Harcourt Brace
Assorted reading laboratory materials

Course: Contemporary Literature

Grade Level: Eleventh and Twelfth

General Objectives:

Develop reading, writing, speaking, and listening skills.
Develop an understanding of one's self.
Develop a tolerance of others' ideas.
Develop an ability to make value judgments.
Develop an understanding of today's changing world.
Develop an appreciation of contemporary literature, its forms, content, and elements.
Develop an appreciation of contemporary literature as a means of using leisure time
Develop an understanding of the changing work ethic through literature.

Teaching Units:

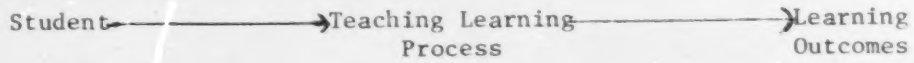
Personal Identity
Human Relationships
Conflict
Justice and Injustice
Man in Society

Basic Materials:

Voices in Literature, Language and Composition 4, Ginn and Company, 1969.
Conflict, Holt, Rinehart, and Winston, Inc., 1969.
Adventures in Modern Literature, Harcourt, Brace, and World, 1962.

Writing Career Development Instructional Activities

Normal E. Gronlund, in his book entitled "Stating Behavioral Objectives for Classroom Instruction," describes the relationship of learning outcomes to the educational process in the following manner:



In the diagram, it is suggested that the learning process be focused on and begin with the student geared to his interests and needs. Through the teaching-learning process the student will be led to desired learning otucomes. Through learning experiences based on interaction of subject matter, teaching methods, and instructional materials with student interests and needs, the student will develop those knowledges, understandings, abilities, and skills that will meet his needs as he prepares to enter and make his contribution to society.

Applying Gronlund's illustration to the process being described in this publication, the next step in the process of integrating the career development concept into the curriculum is to develop the teaching-learning processes needed to convert the career development objectives into learning outcomes. As Dewey states when describing learning "Between the pupil (the initial stage) and the teacher (the remote limit) be mean . . . -- acts to be performed; difficulties to be overcome; appliances to be used." This process includes (1) developing specific instructional objectives and classroom learning activities, (2) identifying the units of instruction and specific subject matter into which the instructional objective will be integrated, (3) identifying the resource materials that will be used to teach the subject matter and career development concept, and (4) describing how the process will be evaluated to determine whether the desired outcomes have been attained.

First and foremost in this process is the establishment of sound instructional objectives. These objectives should be stated in clear, attainable terms that are capable of assessment. In commenting on staing educational objectives, Dr. Ralph Tyler, in the September 1973 issue of the Phi Delta Kappan states, "If a teacher is to use his statement of objectives to guide his planning and teaching, he needs to know what they mean, and if tests are to be constructed to assess the extent to which students are achieving the objectives, these aims must have a clear meaning."

Instructional objectives should relate directly to the curriculum level career education objective and the subject matter in which the instructional objective is to be implemented. In addition, they should suggest and/or identify criteria that can be used to evaluate student outcomes.

As teachers develop instructional objectives to guide their planning and teaching of the concepts inherent in the career education objectives, certain practices should be followed to insure a thorough integration of the career concepts in the school curriculum. Instructional objectives should be written for each career development objective. Attempting to develop instructional objectives for two or more career development objectives at once tends to make the instructional objectives so general that they are not clear and attainable, and it is difficult for the

teacher to identify evaluative criteria inherent in the instructional objectives. One or several instructional objectives can be developed to satisfy the career development objective. The scope of the career development objective will dictate the number of instructional objectives required to implement it. Caution should be exercised to avoid dealing with several concepts in the instructional objectives under one career development objective. If two or more concepts are included in the instructional objectives, these concepts should be clearly inferred in the curriculum level career development objective for which they are written.

Once sound, thoughtful instructional objectives have been written for each career development objective, classroom learning activities should be written that will implement the instructional objectives in the program of study. These activities should describe the subject matter to be covered and the career development concepts that are to be dealt with by the student. Stating learning activities by titles only should be avoided. Each activity should be described in detail and provide a statement of what the activity is attempting to do for the student. Caution should be exercised not to overdo the listing of activities. The listing and description of a few well-chosen activities is much better than listing many poorly conceived activities that show little if any relationship to the instructional objective or possible desirable student outcomes.

Classroom learning activities identified for each curriculum level career development objective should be developed as a part of a specific unit of instruction. Teaching materials and resources should be identified for each learning activity and evaluation methods and criteria identified for the instructional objectives.

On the following pages, are examples of how teachers converted curriculum level career development objectives into learning outcomes consistent with student interests and needs. The mechanisms identified for converting the curriculum level objectives into student outcomes are clear and logical. The teaching-learning process is clearly discernible and the focus of the instructional process is on meeting the interests and needs of the student.

For each curriculum level career development objective, appropriate instructional objectives were written. These objectives clearly relate to the curriculum level objective and suggest (1) desired student outcomes and evaluative criteria, and (2) appropriate subject matter areas in which the instructional objectives will be implemented. The meaning of each instructional objective is clear and the teachers who wrote them will be able to use them to guide their planning and teaching of the concepts inherent in the objectives in their instructional programs.

Sound teaching-learning activities were developed to support the instructional objectives providing the learning environment whereby the student, assisted by the teacher, could absorb the concepts being studied and convert then to behavioral changes commensurate with his abilities

and interests. The instructional activities describe what will be done in the classroom to implement the instructional objective(s) and provides information relative to the subject matter skills that will be stressed through the learning activity. In addition, the description of the activity provides a statement concerning what each activity is designed to do for the student.

For each instructional activity, the unit of instruction in which that activity is to be included and the resource materials to be used in teaching the unit are identified. Finally, evaluative criteria are identified for each of the instructional objectives. In some instances, the criteria identified are objective in nature while in other instances they are subjective requiring the decision of the teacher concerning the degree of their accomplishment.

Career Education Objective: Becomes aware of own physical characteristics

Instructional Objective: Identifies differences in own and other student body characteristics and how they change

Subject Area: Social Studies, Art, Science

Grade Level: Kindergarten

Activity	Integration into Curriculum	Resources
1. Sit in a circle and look into a mirror. Have each student describe self in such a way that tomorrow the class would know the student when not wearing the same clothes. Emphasize with other class members how each individual's self description is important to them as well as it is to the student who has described himself.	Social Studies	Large mirror
2. Make tempera hand prints for display and discuss individual differences. Compare and contrast hand prints. Discuss how each is unique. Stress that there is no one in the world exactly like me.	Art	Tempera paints of all colors 8½ x 11" white construction paper
3. Make head silhouette of each student using a light bulb or trace around child lying on large white paper. Point out how silhouette of each head is different and so unique to each student. Place around room and have students identify each other.	Art	Electric lamp Roll of white wrapping paper
4. Measure and weigh each student. Weigh each child and write information on growth card during first week of school. Leave scale in room at all times for children to weigh	Science	Bathroom scales Tape measure Brown wrapping paper Chart paper Masking tape

Activity	Integration into Curriculum	Resources
themselves. Measure the height of each student. Cut a piece of brown paper to the student's height and attach to wall in classroom. Have students weigh themselves and measure their change in height bringing their attention to changes in their weight and height. Compare changes among the students to observe how each member is changing in relation to his classmates.		
5. Have children play policeman and lost child game. One child is the policeman, and another is the parent. The parent asks "Mr. Policeman, can you help me find my lost child?" The parent then describes one of the children in the class (color of hair, eyes, clothes, etc.) When the child is found by the policeman, the parent becomes the policeman, and the missing child becomes the parent. The game, as a whole, should stress individual student differences as seen by others.	Physical Education	Policeman's cap Adult male and female clothing

Evaluation:

1. Ability of each student to identify differences among classmates.
2. Ability of each student to use scales and tape measure.
3. Ability of each student to describe personal and other student differences orally.

Career Education Objective: Copes with praise and criticism from adults and peers in a positive manner.

Subject Area: Spelling and Social Studies

Instructional Objective: To experience a feeling of success or failure
To experience and react to criticism and praise by peer group and adults
To develop skill in spelling words orally

Grade Level: Fourth

Activity	Integration into Curriculum	Resources
1. Divide class into two teams. Teacher pronounce words and students spell words orally. If correct, they may stay up, if not, they must sit down. Observe reactions to successfully spelling word or having to sit down. After the spelldown has been completed, have each student write a paragraph describing their feelings as they missed a word and had to sit down.	Spelling	Text: Word Book 4
2. Divide class into two groups according to the color of their eyes. As a teacher, praise the activities of the blue-eyed group for two days. Then reverse the process for another two-day period. Have students describe their feelings to the class when they had experienced both situations. Conclude by discussing spontaneous versus appropriate reactions to each situation.	Social Studies Unit--Learning to Know Ourselves	

Activity	Integration into Curriculum	Resources

Evaluation:

1. Number of students who remained standing on the winning group.
2. Number of words all students spelled correctly.
3. Reactions of students to winning and losing.
4. Expressions of students relative to their feelings about being criticized and praised.

Career Education Objective: Recognizes that personal satisfaction results from work that is interesting to the individual.

Subject Area: Social Studies

Instructional Objective: List reasons why the farmer likes his w[illegible]
Identify careers associated with farmi[illegible]
List various work activities carried out by a farmer

Grade Level: Sixth

Activity	Integration into Curriculum	Resources
1. Have a farmer, implement dealer feed salesman, and county agent visit class and discuss their work.	Social Studies Chapter 7, Part 3	Text: Agriculture: Man and the Land
2. Visit a farm, agricultural station, or a grain elevator and observe the activities of these businesses.		Film: "The Wheat Farmer"
3. Have students write why they would like to be a wheat farmer, a rice farmer, an agricultural scientist, a maker of agricultural machinery, a farmer's wife, or any other relevant agricultural occupation.		

Through the above activities, students should become aware of occupations in the agricultural field and the personal satisfactions that workers experience working in these occupations.

Evaluation:

1. The number of reasons farmers like and/or dislike their work listed by each student.
2. The number of careers identified by each student related to farming.
3. The activities identified with each occupation studied by the class as a whole through class discussion.

Career Education Objective: Recognizes the dignity of all human beings

Instructional Objective: To identify human characteristics which give personal and individual human dignity

Subject Area: American Literature

Grade Level: 11 and 12

Activity	Integration into Curriculum	Resources
1. Give the class details about the life of Ralph Waldo Emerson. Discuss his philosophy concerning the individual worth of the individual man. Stress Emerson's idea that every individual has unique qualities no other man possesses. 2. Read and discuss "Self-Reliance." Stress Emerson's reasons why man should rely upon his own abilities. Also stress Emerson's belief that all people should use their abilities to the fullest extent.	Unit - "Ending a Long Apprenticeship. 1835 - 1860	"Self-Reliance" by Ralph Waldo Emerson Lecture: "Life of Ralph Waldo Emerson"

Evaluation:

1. Students' discussions of the world of work as seen by Emerson.
2. Student lists of individual abilities as set down by Emerson.
3. Unit test over Emerson's publication entitled, "Self-Reliance."

The process of integrating the career development concept in the school curriculum described in this publication evolves around the use of objectives (curriculum and instructional level). If a well articulated approach to integration and implementation of the concept is to be achieved within a school curriculum, objectives must be used to direct the planning and implementation process. The point has been made by some local teachers and administrators that they have never written or used educational objectives in their planning and teaching. This generalization is difficult to believe and approaches the point of absurdity. What teacher begins teaching a class without some preconceived ideas about how the student should benefit from his or her instruction during that class period? Effective teaching does not just happen. It emerges as a result of sound planning and the establishment of specific goals and student outcomes prior to teaching the class.

To most teachers, the most important part of the teaching-learning process presented on the previous pages is the instructional activity. This is an understandable reaction for the educational practitioner who spends the majority of his or her time contriving teaching activities that will lead to desired learning outcomes for the student. Some teachers may use these activities as their guide in integrating the career development concept in their curricula without first studying the concept, determining the needs of their students, establishing a mechanism to convert the concept from theory to practice, and evaluating their curriculum to determine how the concept can best be integrated into their system to meet student needs and enrich the present program of study. The result of such an approach will be a fatal disconnection of learning activities within the programs of study that will kill the vitality of the concept and lead to its eventual exclusion from the programs of study within the curricula of these schools. Educators in these systems will look back on their efforts and refer to it as another of those "educational fads" and turn their attention to the next "fad" without really improving upon their programs of study and their total curriculum efforts.

In those schools where the faculty studies the concept, identifies how it can be used to satisfy unmet student needs, determines how it can be integrated into their curricula and establishes a sound mechanism that will convert the concept from theory to practice, the faculty and school will reap rich rewards in terms of student outcomes and personal teaching experiences. In these schools, the career development concept will become an integral, lasting part of the total school curriculum.

Evaluating Career Development Activities

The final step in integrating the career development process into the curriculum is that of evaluation. During this phase of the curriculum building process, teachers and educational planners at all levels have an opportunity to assess the degree to which they have integrated the concept into the curriculum and realized predetermined student outcomes. Too often, evaluation of educational processes and student outcomes are omitted. Grandiose generalizations are made with reference to achievements with little if any real evidence to support these generalizations. Due to the fact that the career development process is devel-

opmental in nature, geared to the developing maturity, needs, and interests of the student, it is imperative that teachers seek out meaningful evidence relative to the instructional and career objectives that will accurately reflect on the students' mastery of the concepts studied. This will require establishing evaluative criteria for each instructional objective and learning activity. If evaluative criteria are difficult to determine, the instructional objective should be revised to state clearly these criteria.

Once evaluative criteria have been identified, the level of acceptable performance expected of each student and the means of determining the level of performance should be stated. The following illustrations reveal a sound approach to evaluating student outcomes relative to career development objectives.

Self-Concept

1.3 Becomes aware of own physical characteristics

Instructional Objective
Student will be able to describe specific physical characteristics

Criteria
1. Can describe hair and eye color
2. Can name body parts and point to correct part--shoulder, elbow, knee, ankle

Level of Performance
All students should be able to carry out the above activities after participating in specified activities.

Means of Evaluation
Check list for each specific point

World-of-Work-Concept

2.1 Sees work including various activities
2.1.1 Sees work producing goods and services

Instructional Objective
To identify and indicate goods or services produced or performed by various specified workers whom they have visited or interviewed.

Criteria
Given a list of workers and of goods or services, student will be able to match goods and/or services with workers or role play the proper activities for each.

Level of Performance
95% accuracy per student and class

Means of Evaluation
Teacher-made matching test
Teacher observation of role-playing activity

Self and the World-of-Work

3.8 Relates successfully with various peer groups

Instructional Objectiv
Student will recognize and appreciate contributions of individual peer group members to class activities

Criteria
Student will select peer partners according to ability, not just personal preference

Level
Student - 50% of time
Class - 80% of time

Means of Evaluation
Two sociograms on choosing work or activity partners, taken three months apart; teacher administration and interpretation

The composite results of evaluation efforts of all teachers to determine their effectiveness in integrating the career development objectives into their courses of study should be analyzed by educational planners to determine the degree to which the concept has been integrated into the total curriculum. This will require a systematic approach to evaluation throughout the school system that relies on many sources of information.

Testing and Revising Instructional Materials

Once instructional materials have been written, they should be tested to determine their effectiveness in developing, in the student, an understanding of the career development concepts. Experience has shown that it is difficult for teachers to write sound, effective curriculum materials for use in the classroom the first time they attempt such a task. This is a normal outgrowth of such a process and underscores the importance of testing and revising the materials as they are used in the classroom.

As the materials developed earlier are used in the classroom, they should be carefully analyzed by each teacher to determine their effectiveness as teaching materials. Answers to questions such as: Were the curriculum and instructional level objectives stated clearly and did they confront areas of student interests and needs? Did the instructional activities provide the means whereby student needs and instructional objectives were met? Did the suggested evaluation criteria assess behavioral changes in the students and provide information needed to determine the appropriateness of the instructional objective(s)? As a result of implementing the instructional activities in the classroom, did the course of study objectives relating to the career development objectives need revision?

The process of revising the curriculum materials is a continuous one. Notations should be made on the guides followed by teachers, when teaching the career development concepts, as they are taught. Periodically, conferences among teachers within each instructional level should be held to discuss the uses and outcomes of the materials and coordinate classroom activities between grade levels. When the revision of curriculum materials for each career development objective is complete, the materials should be filed for use in the future.

Setting up a Timetable for Integrating Career Development Concept in the School Curriculum

If the career development concept is to be integrated into the school curriculum in a distinct and profound manner, a timetable should be developed for initiating each step in the implementation process. A list of implementation activities should be developed by the career education coordinator in the school with tentative completion dates established for each activity. This timetable should be given to each faculty member and followed carefully as the concept is implemented in the school curriculum. The schedule provided on the following pages is an example of a timetable for integrating the career development concept in a school curriculum based on information presented in this publication.

Summary

Career education is an exciting innovation in public education in America. It is exciting because it redirects the learning process toward the student. Inherent in this new direction in education are changes in the structure and operation of the school built from within the present school structure by the faculty and administration.

The procedures for integrating and implementing the career development concept in the school curriculum described in this publication have been tested in nine public school systems in Iowa. Successful use of these procedures in other school systems will depend largely on the desire of the faculty, administration, and community in these school districts to provide an understanding of career education concepts for their students. Once a school district has made this commitment, procedures described in this publication will be most helpful as it proceeds to integrate the concept into its school curriculums.

A Timetable for Integrating the Career

Development Concept into the School Curriculum

Things To Do	By This Date
1. Review literature on career education.....	_____
2. Visit school systems implementing the career development concept in their curricula.....	_____
3. Appoint a task force to develop a tentative definition of career education for the school.....	_____
4. Develop a tentative definition of career education for school.....	_____
5. Develop a tentative model conceptualizing the integration of the definition into the school structure.....	_____
6. Initiate faculty in-service programs on career education.....	_____
7. Develop final definition of career education.....	_____
8. Revise tentative model to include revisions in the final definition.....	_____
9. Make definition and model available to parents, students and community representatives for their critique.....	_____
10. Identify appropriate resource personnel and schedule them to speak to faculty as a part of in-service program on career education.....	_____
11. Conduct self-awareness program for faculty members.....	_____
12. Establish curriculum level career development objectives for each phase of career development.....	_____
13. Coordinate objectives between instructional levels (articulation).....	_____

By This Date

14. Have curriculum objectives reviewed by parents, students, community representatives and representatives from selected educational and related disciplines....._____

15. Revise objectives to include reactions of reviewers....._____

16. Establish at which grade level each objective will be taught within each instructional level based on student interests and needs....._____

17. Assign objectives to subject matter areas....._____

18. Analyze and revise course descriptions, course objectives, teaching units, and instructional materials to include the curriculum level career education objectives....._____

19. Write instructional objectives for each career development curriculum objective....._____

20. Develop classroom learning activities for each instructional objective....._____

21. Identify evaluative criteria and methods of evaluating student outcomes relative to the instructional objectives....._____

22. Test and revise learning activities....._____

23. Develop measures to evaluate the impact of the concept on the curriculum, the teacher, and the student....._____